A synthetic probe, STR 16C17, detects a new polymorphic locus at 17pter (D17S450)

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Description: STR 16C17 is the double stranded DNA probe of sequence $(AGAACCAGGCTCAGGG)_n$ obtained by annealing of the oligonucleotide 5'AGAACCAGGCTCAGGG3' with the overlapping complementary 5'CTGGTTCTCCCTGAGC 3' followed by ligation and size selection of fragments above 400 bp, as described previously (1, 2).

Polymorphism: HaeIII identifies ten alleles ranging from 2 kb to 8 kb (2).

Size (kb)	2	2.5	3	3.5	4	4.5	6	7	7.5	8
Frequency (%)	1.5	6	9	26.5	50	3.5	1.5	1	0.5	0.5

Frequency: The heterozygosity rate in 126 unrelated individuals (grandparents or parents when no grandparent is available) from the CEPH panel is 65%.

Not Polymorphic For: Unknown.

Chromosomal Localisation: The locus detected by STR 16C17 has been localised to the extremity of the short arm of chromosome 17 by linkage analysis using the CEPH pedigree panel and CEPH database version 3 (4 cM from probe 144D6, Lod score 68).

Mendelian Inheritance: Codominant segregation of the HaeIII RFLPs was observed in 40 families from the CEPH panel.

Other Comments: The STR probe is labelled by random priming, hybridised at 50°C overnight in a buffer containing 2% SDS; 0.45 M Na_2PO_4 pH 7.2; 1 mM EDTA; 0.5% dried milk and washed at 55°C in 2×SSC and 0.1% SDS for 2×45 min (1×SSC is 0.15 M NaCl − 15 mM sodium citrate).

References: 1) Vergnaud,G. (1989) *Nucl. Acids Res.* **17**, 7623−7630. 2) Vergnaud,G., Mariat,D., Zoroastro,M. and Lauthier,V. (1991) *Electrophoresis* **12**, 134−140.

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A synthetic probe, STR 14C13, detects a new polymorphic locus on chromosome arm 7q (D7S450)

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Description: STR 14C13 is the double stranded DNA probe of sequence $(AGCCGTCTGTTTTC)_n$ obtained by annealing of the oligonucleotide 5'AGCCGTCTGTTTTC3' with the overlapping complementary 5'GACGGCTGAAAACA3' followed by ligation and size selection of fragments above 400 bp, as described previously (1, 2).

Polymorphism: HaeIII identifies five alleles above 2 kb ranging from 3 kb to 5 kb. Alleles below 2 kb could not be analysed because of other cross-hybridizing loci in that area.

Size (kb)	<2	2.5	3	3.5	4	4.5	5	5.5
Frequency (%)	8	3	6.5	37	10	3	32	0.5

Frequency: The heterozygosity rate in 91 individuals (grandparents or parents when no grandparent is available) from the CEPH panel is 48%.

Not Polymorphic For: Unknown.

Chromosomal Localisation: The locus detected by STR 14C13 has been localised to the long arm of chromosome 7 (Lod score of 14 at a distance of 5 cM to CRI L544) by linkage analysis using the CEPH pedigree panel and CEPH database version 3.

Mendelian Inheritance: Codominant segregation of the HaeIII RFLPs was observed in 40 families from the CEPH panel.

Other Comments: The STR probe is labelled by random priming, hybridised at 50°C overnight in a buffer containing 2% SDS; Na_2PO_4 pH 7.2; 1 mM EDTA; 0.5% dried milk and washed at 50°C in 1×SSC and 0.1% SDS for 2×45 min. (1×SSC is 0.15 M NaCl − 15 mM sodium citrate).

References: 1) Vergnaud,G. (1989) *Nucl. Acids Res.* **17**, 7623−7630. 2) Vergnaud,G., Mariat,D., Zoroastro,M. and Lauthier,V. (1991) *Electrophoresis* **12**, 134−140.

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